

## PATENT ABSTRACTS OF JAPAN

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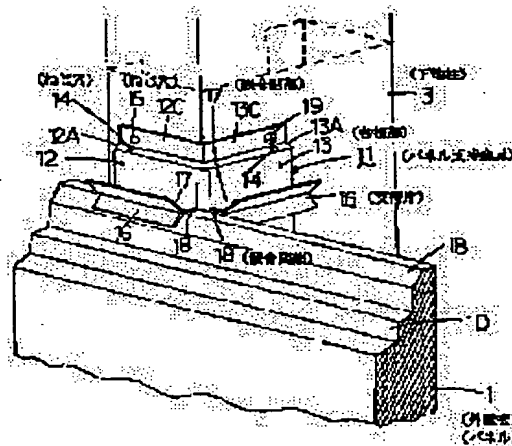
(72)Inventor : ITO HIDEHITO

## (54) PANEL ATTACHING PROCESS

## (57)Abstract:

**PROBLEM TO BE SOLVED:** To provide a process of attaching a panel, which can easily attach a building material panel or the like to a bass pillar from the outside.

**SOLUTION:** A panel support fixture 11 having double surface base panel parts 12, 13 bent by an angle of about 90deg., is made into contact with a corner part composed of an outer surface of a base pillar 3 and one of side surfaces, the based panel part 13 is fixed to the inside of a building with the use of screws, nails or the like. End edge parts of upper and lower panels 1, 1 are fitted in fitting parts 17, 18 in the opposite sides of the support pieces 16 of a panel support fitting 11.



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**CLAIMS**

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**[Claim(s)]**

[Claim 1] The base plate which consists of the base plate section of the second page crooked at 90 degrees of process 1 abbreviation which arranges a lower panel on the outside which is a panel-mounting side of a substratum cylinder, It consists of a piece of support which is set up from the base plate section interval of these two sides, respectively, and has the panel edge fitting section on both sides. The top edge of this panel is fitted into the bottom panel edge fitting section of the piece of support of the base plate section of the direction which contacts the superficies of this substratum cylinder of this panel dummy support while the corner formed of the superficies of this substratum cylinder and one side face is contacted in the panel dummy support by which the tapped hole was prepared in the base plate section of the second page, respectively. this — And the base plate section of the direction which contacts the side face of this substratum cylinder of this panel dummy support On the outside of the process 2 this substratum cylinder fixed to this substratum cylinder side face, an upper panel By repeating two or more steps of four or more processes [ which fit the bottom edge of this top panel into the top panel edge fitting section of the piece of support of the base plate section of the direction which contacts the superficies of this substratum cylinder of the process 3 this panel dummy support to arrange ] processes 1, 2, 3, and 4 The panel anchoring method of construction characterized by attaching a panel in a substratum cylinder by the panel dummy support serially, and going from the bottom

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**DETAILED DESCRIPTION**

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**[Detailed Description of the Invention]**

[0001]

[Field of the Invention] this invention relates to the method of construction which attaches building-materials panels, such as for example, an outer wall plate, in a substratum cylinder.

[0002]

[Background of the Invention] The residence in the ground in the heart of Tokyo etc. is in the inclination which lessens the spacing with the established building which adjoins from the point of the deployment of land as much as possible, and is built. In the housing construction with little spacing with such an adjoining established building, the shipfitter thing of the outer wall plate from an outdoors side must become impossible, and an outer wall plate must be attached from an indoor side.

[0003]

[Description of the Prior Art] As conventionally shown in drawing 10, it is a minerals outer wall plate (1). Centrum formed in the interior (2) It is a metal insertion rail (4) inside. It inserts. on the other hand — substratum cylinder (3) \*\*\*\* — metal channel piece (5) It multiplies. An indoor side to this channel piece (5) Tapped hole (6) It minds and \*\*\*\*s and is (7). This outer wall plate (1) It is made to penetrate and is an insertion rail (4). The configuration screwed on (JP,3-61011,U), Or as shown in drawing 11, it is a minerals outer wall plate (1). It replaces with an insertion rail inside and is an insertion plug (8). It embeds. This insertion plug (8) An indoor side to channel piece (5) Tapped hole (6) It minds and \*\*\*\*s and is (7). The configuration (JP,3-61033,U) screwed on is offered.

[0004]

[Problem(s) to be Solved by the Invention] However, it sets in a configuration conventionally [ above-mentioned ], and is an outer wall plate (1). They are an insertion rail (4) and an insertion plug (8) inside. Since it inserts, it is an outer wall plate (1). Time is \*\*\*\*\* and an outer wall plate (1) to a manufacture. It has influence also on an intensity. Furthermore, outer wall plate (1) It \*\*\*\*s and the stress by the weight, the vibration from the exterior, etc. is (7). A rail (4) or insertion plug (8) It is easy to concentrate on a junction, since an attachment intensity is not enough, it is based on this stress and \*\*\*\*s, and it is (7). Breakage and insertion plug (8) It falls out and is an outer wall plate (1) by the grade. When it is easy to drop out,

[0005]

**[Means for Solving the Problem]**

the means for this invention solving the above-mentioned conventional technical problem \*\*\*\*\* — substratum cylinder (3) the outside which is a panel-mounting side — lower panel (1) The base plate section (12, 13) of the second page crooked at 90 degrees of process 1 abbreviation to arrange \*\*\*\* — with the becoming base plate The base plate section of these two sides (12, 13) It is set up from the interval, respectively and is the panel edge fitting section (17, 18) to both sides. It consists of a piece (16) of support which it has. this — the base plate section (12, 13) of the second page \*\*\*\* — respectively — tapped hole (14, 15) the prepared panel dummy support (11) — this substratum cylinder (3) While the corner formed of the superficies and one side face is contacted This substratum cylinder of this panel dummy support

(11) (3) It is this panel (1) to the bottom panel edge fitting section (18) of the piece (16) of support of the base plate section (12) of the direction which contacts outside. The top edge (1B) is fitted in. and this substratum cylinder (3) of this panel dummy support (11) The base plate section (13) of the direction which contacts \*\*\*\*\* this substratum cylinder (3) Process 2 this substratum cylinder (3) fixed to the side face To \*\*\*\*\* , an upper panel This substratum cylinder of the process 3 this panel dummy support (11) to arrange (3) It is this top panel (1) to the top panel edge fitting section (17) of the piece (16) of support of the base plate section (12) of the direction which contacts outside. The four or more processes [ which fit in the bottom edge (1A) ] processes 1, 2, 3, and 4 It is a panel (1) serially from the bottom by repeating two or more steps. Substratum cylinder (3) The panel anchoring method of construction which attaches and goes by the panel dummy support (11) is offered.

[0006]

[Function] The base plate of the panel dummy support (11) of this invention is the base plate section (12, 13) of the second page crooked at 90 degrees of abbreviation. Since it has Substratum cylinder (3) The base plate section (12) of one field is this substratum cylinder (3) to a predetermined corner. Panel-mounting side (superficies), The base plate section (13) of the field of another side is this substratum cylinder (3). While it contacts so that it may be located in the side face, it is a lower panel (1). The edge (1B) Substratum cylinder of this panel dummy support (11) (3) It is a substratum cylinder (3) about the base plate section (13) of the direction which fits into the bottom panel edge fitting section (18) of the piece (16) of support of the base plate section (12) of the direction which contacts outside, and contacts the side face. It fixes. Although this fixed work is performed through the tapped hole (15) of for example, the base plate section (13) using a screw thread, a nail, etc., this fixed work is a substratum cylinder (3). Since it is carried out on the side face, it can carry out from indoor. Furthermore, substratum cylinder (3) The base plate section (13) of the field of another side is this substratum cylinder (3) to \*\*\*\* of a different position. The base plate section (12) of a clamp face and one field is this substratum cylinder (3). A panel dummy support (11) can also be attached so that it may be located in the side face. Thus, substratum cylinder (3) It sets to the piece (16) up side of support, and the fixed panel dummy support (11) is an upper panel (1). It is this panel (1, 1) of vertical both sides at this panel dummy support (11) by fitting the edge (1C) into the top panel edge fitting section (17) of the piece (16) of support of this base plate section (12). It supports. And panel of both sides (1, 1) Edge (1B, 1C) The fitting section of the piece (16) of support of this panel dummy support (11) (17, 18) In fitting in It is this panel (1, 1) by the base plate section (13) fraction of the both sides of this piece (16) of support. Edge (1B, 1C) Since it is guided and the base plate section (13) fraction of the both sides of this piece (16) of support is grade quantity, it is the panel (1, 1) of these vertical both sides. A level difference is not produced.

[0007]

[Example] If one example which shows this invention to drawing 1 - view 8 explains, the base plate of a panel dummy support (11) is crooked at 90 degrees of abbreviation, and it is the base plate section (12, 13) of the second page. It is formed. Each base plate section (12, 13) In an ends edge, it is a slant face (12A, 12B, 13A, 13B). It is formed. one slant face (12A, 13A) \*\*\*\* — further — piece (12C, 13C) of attachment it extends — having — this slant face (12A, 13A) Piece (12C, 13C) of attachment \*\*\*\* — respectively — tapped hole (14, 15) It is prepared. This base plate section (12, 13) From the interval, the cross-section [ of Y characters ]-like piece of support (16) is set up, and it is a panel (1) in the both sides of this piece (16) of support. Edge (1B, 1C) Fitting concavity which is the fitting section which fits in (17, 18) It is formed.

[0008] The above-mentioned panel dummy support (11) is used, and it is an outer wall plate (1) from indoor. Substratum cylinder (3) The construction technique to attach is explained below. Outer wall plate which is the building-materials panel by which this panel dummy support (11) is applied to drawing 2 (1) It is shown. This outer wall plate (1) It consists of a woody plate, a minerals plate, etc. in an end edge Upper fruit (1A), The lower fruit (1B) is formed in the other end edge, and it is the fitting concavity (17, 18) of the piece (16) of support of this panel dummy support (11) in the upper fruit (1A) bottom. The fitting heights (1C) which fits into either is formed, and the step (1D) is formed in the lower fruit (1B) bottom.

[0009] Outer wall plate which uses this panel dummy support (11) for drawing 3 (1) The basic fraction of attachment structure is shown. C type channel by which this basic fraction is installed on a footing (20) and this footing (20) (21). It consists of the water-break metallic ornaments (22) which \*\*\*\* on the outside of this C type channel (21), and are attached firmly by (23). This water-break metallic-ornaments (22) top (22A) In a predetermined part, it is a notch (22B). It is prepared and is this notch (22B). Substratum cylinder which is C type channel in a part (3) It is set up. it is shown in drawing 4 — as — this substratum cylinder (3) it sets up from a footing (20) at the predetermined spacing — having — \*\*\*\* — further — outer wall plate (1) The square shape substratum cylinder (3A) is arranged at the lateral joint.

[0010] Thus, when setting up a substratum cylinder (3, 3A), it is the outer wall plate (1) of the upper part to [ between indoor to substratum cylinders (3, 3A) or ] the least significant. It arranges on the outside of this substratum cylinder (3, 3A). it is shown in drawing 3 — as — this outer wall plate (1) the fitting heights (1C) of a soffit edge — minding — protruding edge (22C) of water-break metallic ornaments (22) it supports — making — this outer wall plate (1) the position of a upper-limit edge — this panel dummy support (11) — substratum cylinder (3) It attaches. This dummy support (11) is this substratum cylinder (3) about a sheet of base plate section (12), as shown in drawing 5 . It arranges to a panel-mounting side (superficies). It is this substratum cylinder (3) about the base plate section (13) of other sides. It arranges on the side face, it sets indoors, and is this substratum cylinder (3). Although the base plate section (13) of this dummy support (11) is \*\*\*\*ed through a tapped hole (15) on the side face and it fixes with (19) or a nail In this case, it is the outer wall plate (1) of the least significant to the fitting concavity (18) of the piece (16) bottom of support of this dummy support (11). A upper-limit space-under-the-porch fruit (1B) is fitted in.

[0011] Thus, outer wall plate of the least significant (1) Protruding edge of water-break metallic ornaments (22) (22C) Although supported between dummy supports (11) Outer wall plate (1) As both the lateral edge sections joint is shown in drawing 6 , a dummy support (11) is attached in Morozumi of a square shape substratum cylinder (3A), respectively. One dummy support (11) is one outer wall plate (1) at the piece (16) of support by the side of the base plate section (12). It supports. The dummy support (11) of another side is the outer wall plate (1) of another side at the piece (16) of support by the side of the base plate section (13). Outer wall plate supported and joined (1, 1) \*\*\*\*\* (24) is made to intervene in between.

[0012] Thus, outer wall plate of the least significant (1) When attaching in a substratum cylinder (3, 3A), it is the following outer wall plate (1) on it. It arranges on the outside of this substratum cylinder (3, 3A) between indoor to substratum cylinders (3, 3A), or from the upper part. it is shown in drawing 7 — as — this outer wall plate (1) the fitting heights (1C) of a soffit edge — the fitting concavity (17) of the piece (16) of support of this dummy support (11) — fitting in — an upper fruit (1A) — lower outer wall plate (1) It compares to the step (1D) of a upper-limit edge. Thus, as shown in drawing 8 , it is an outer wall plate (1). It arranges in a column and is a substratum cylinder (3). Although it attaches through a dummy support (11), a wall is constructed and it goes, since such all construction can be performed from indoor, adjoining building B shown in drawing 4 does not interfere in this construction work.

[0013] Other examples of the dummy support used for the method of construction of this invention are shown in drawing 9 . the base plate section (32, 33) of the second page to which the dummy support (31) of this example was crooked at 90 degrees of abbreviation \*\*\*\* — with the becoming base plate This base plate section (32, 33) It consists of a piece (36) of support set up from the interval. Up both pars marginalis is bent caudad, a fitting concavity (38) is formed in a center section at fitting concavity (37) both pars marginalis, and the upper-limb center section of this piece (36) of support is this base plate section (32, 33). In the upper-limit section, it is a tapped hole (34, 35). It is prepared.

[0014]

[Effect of the Invention] Therefore, it is not necessary to insert the insertion member for holding a screw thread, a nail, etc. in a panel side in this invention. Can attach a panel in a substratum cylinder from indoor, and do not degrade a panel intensity, and a panel-mounting intensity will also become sufficiently big, and The work which fits the panel edge into the fitting section of

the piece of support of a dummy support also becomes easy by the guide of the base plate section fraction of the both sides of this piece of support, and the base plate section fraction of the both sides of this piece of support does not produce a level difference on both the panels joined since it is grade quantity, and appearance becomes good.

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**DESCRIPTION OF DRAWINGS**

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**[Brief Description of the Drawings]**

Drawing 1 - view 8 shows one example of this invention.

[Drawing 1] Panel dummy support

[Drawing 2] Outer wall plate partial side elevation

[Drawing 3] Basic partial perspective diagram

[Drawing 4] Outer wall plan

[Drawing 5] The support partial perspective diagram of an outer wall plate

[Drawing 6] Outer wall plate longitudinal direction joint part plan

[Drawing 7] Outer wall plate lengthwise joint part sectional side elevation

[Drawing 8] Outer wall plate lengthwise joint part perspective diagram

[Drawing 9] The perspective diagram of other examples

[Drawing 10] Explanatory drawing of the conventional example

[Drawing 11] Explanatory drawing of other conventional examples

**[Description of Notations]**

1 Outer Wall Plate (Panel)

3 Substratum Cylinder

11, 31 Panel dummy support

12, 13, 32, 33 Base plate section

14, 15, 34, 35 Tapped hole

16, 36 Piece of support

17, 18, 37, 38 Fitting concavity

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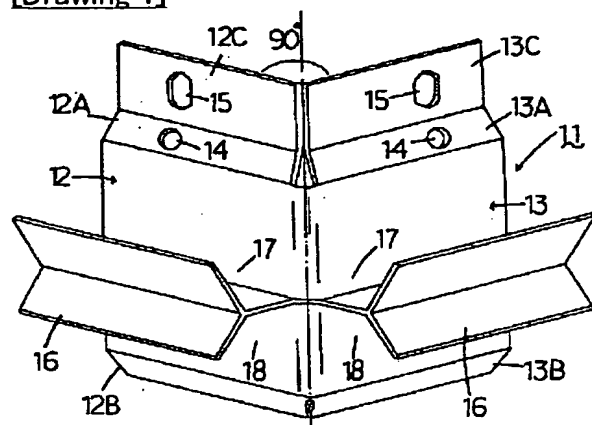
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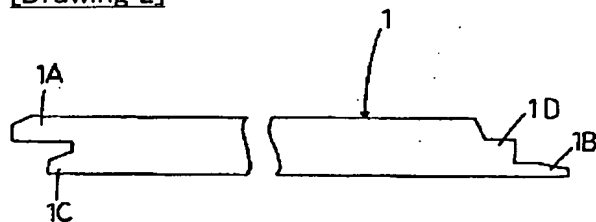
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## DRAWINGS

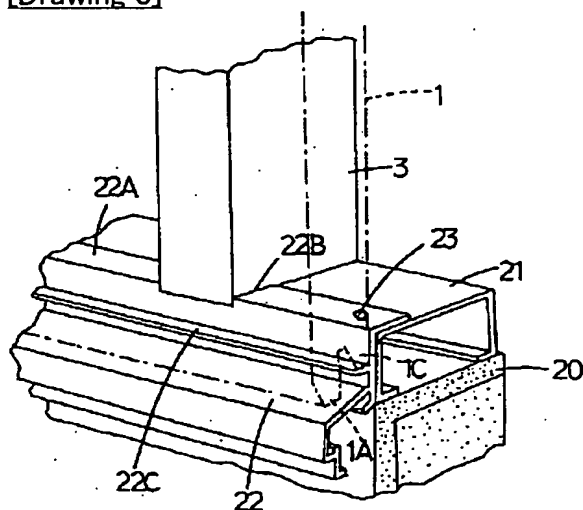
[Drawing 1]



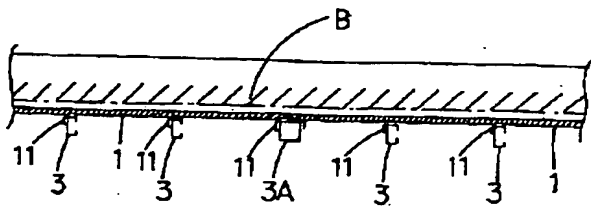
[Drawing 2]



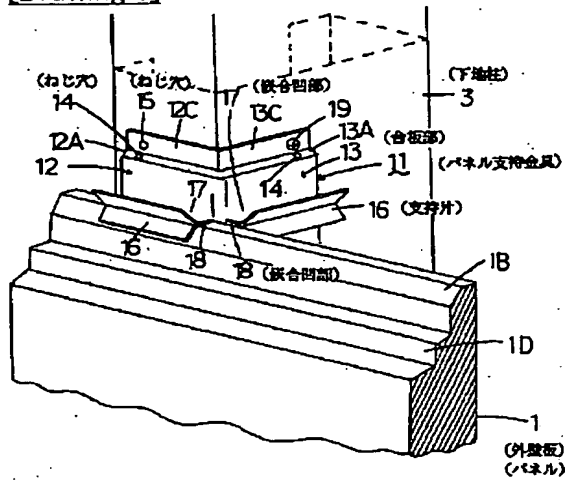
[Drawing 3]



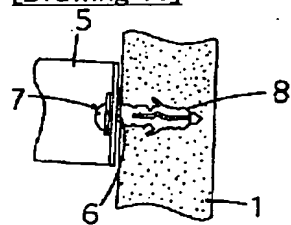
[Drawing 4]



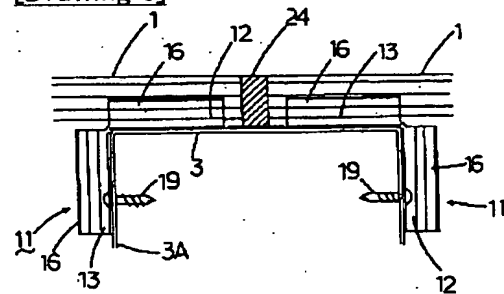
[Drawing 5]



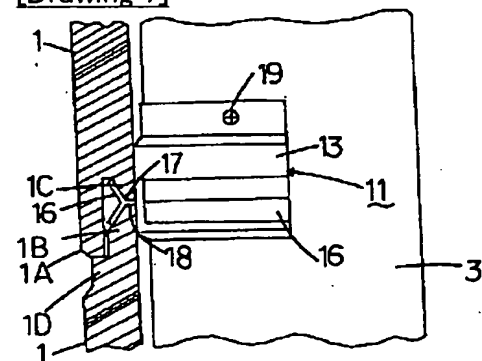
[Drawing 11]



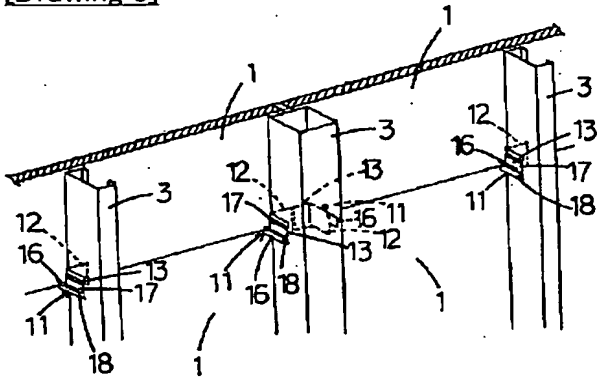
[Drawing 6]



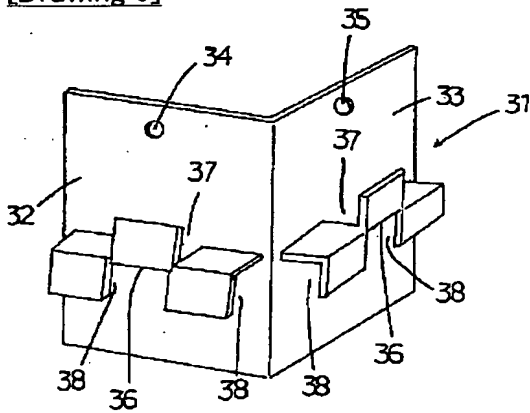
[Drawing 7]



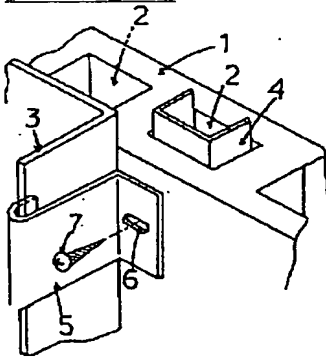
[Drawing 8]



[Drawing 9]



[Drawing 10]



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[Translation done.]

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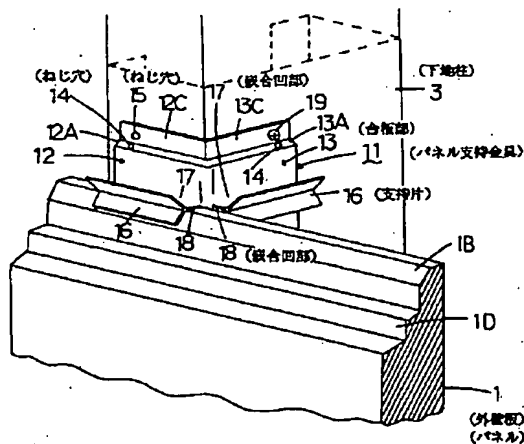
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(54) 【発明の名称】 パネル取付け工法

(57) 【要約】

【課題】本発明は屋内から下地柱に建材パネル等を容易に取付けることが出来るようなパネル取付け工法を提供することを課題とする。

【解決手段】略90°に屈曲した二面の台板部12、13を有するパネル支持金具11を下地柱3の外周と一方の側面とによって形成される角部に当接し、該下地柱3の側面において一方の台板部13を屋内においてねじ19や釘等にて固定し、該パネル支持金具11の支持片16の両側の嵌合凹部17、18に下側と上側のパネル1、1の端縁部を嵌合する。



## 【特許請求の範囲】

【請求項1】下地柱のパネル取付側である外側に下側のパネルを配置する工程1

略90°に屈曲した二面の台板部からなる台板と、該二面の台板部中間から夫々立設され両側にパネル端縁嵌合部を有する支持片とからなり、該二面の台板部には夫々ねじ穴が設けられたパネル支持金具を該下地柱の外面と一方の側面とによって形成される角部に当接すると共に該パネル支持金具の該下地柱の外面に当接する方の台板部の支持片の下側パネル端縁嵌合部に該パネルの上側端縁を嵌合し、かつ該パネル支持金具の該下地柱の側面に当接する方の台板部を該下地柱側面に固定する工程2

該下地柱の外側に上側のパネルを配置する工程3

該パネル支持金具の該下地柱の外面に当接する方の台板部の支持片の上側パネル端縁嵌合部に該上側パネルの下側端縁を嵌合する工程4

以上の工程1、2、3、4を複数段繰返すことによって下側から逐次パネルを下地柱にパネル支持金具によって取付けて行くことを特徴とするパネル取付け工法

## 【発明の詳細な説明】

【0001】

【産業上の利用分野】本発明は例えば外壁板等の建材パネルを下地柱に取付ける工法に関するものである。

【0002】

【発明の背景】都心地等における住宅は土地の有効利用の点から隣接する既設建築物との間隔を出来るだけ少なくして建設される傾向にある。このような隣接する既設建築物との間隔が少ない住宅建設においては、屋外側からの外壁板の取付工事が不可能となり、屋内側から外壁板を取付けなければならない。

【0003】

【従来の技術】従来は図10に示すように無機質外壁板(1)内部に形成された中空部(2)内に金属製インサートレール(4)を挿入し、一方下地柱(3)には金属製のチャンネルピース(5)を掛合し、屋内側から該チャンネルピース(5)のねじ穴(6)を介してねじ(7)を該外壁板(1)を貫通させインサートレール(4)に螺着した構成(実開平3-61011号)、あるいは図11に示すように無機質外壁板(1)内部にインサートレールに代えてインサートブラグ(8)を埋込んでおいて、該インサートブラグ(8)に屋内側からチャンネルピース(5)のねじ穴(6)を介してねじ(7)を螺着した構成(実開平3-61033号)等が提供されている。

【0004】

【発明が解決しようとする課題】しかしながら上記従来構成においては、外壁板(1)内にインサートレール(4)やインサートブラグ(8)を挿入するから、外壁板(1)の製造に手間がかかり、また外壁板(1)の強度にも影響がある。更に外壁板(1)の重量や外部からの振動等による応力はねじ(7)とレール(4)あるいはインサートブラグ

(8)との接合点に集中し易く、取付強度が充分でないの  
で該応力によるねじ(7)の折損やインサートブラグ(8)  
の抜け落ち等によって外壁板(1)が脱落し易いと言う問  
題点がある。

【0005】

【課題を解決するための手段】

本発明は上記従来の課題を解決するための手段として、  
下地柱(3)のパネル取付側である外側に下側のパネル  
(1)を配置する工程1

10 略90°に屈曲した二面の台板部(12,13)からなる台板  
と、該二面の台板部(12,13)中間から夫々立設され両側  
にパネル端縁嵌合部(17,18)を有する支持片(16)とから  
なり、該二面の台板部(12,13)には夫々ねじ穴(14,15)  
が設けられたパネル支持金具(11)を該下地柱(3)の外  
面と一方の側面とによって形成される角部に当接すると  
共に該パネル支持金具(11)の該下地柱(3)の外面に当接  
する方の台板部(12)の支持片(16)の下側パネル端縁嵌  
合部(18)に該パネル(1)の上側端縁(18)を嵌合し、かつ該  
パネル支持金具(11)の該下地柱(3)の側面に当接する方  
20 の台板部(13)を該下地柱(3)側面に固定する工程2

該下地柱(3)の外側に上側のパネルを配置する工程3

該パネル支持金具(11)の該下地柱(3)の外面に当接する  
方の台板部(12)の支持片(16)の上側パネル端縁嵌合部(1  
7)に該上側パネル(1)の下側端縁(1A)を嵌合する工程4  
以上の工程1、2、3、4を複数段繰返すことによって  
下側から逐次パネル(1)を下地柱(3)にパネル支持金具  
(11)によって取付けて行くパネル取付け工法を提供する  
ものである。

【0006】

30 【作用】本発明のパネル支持金具(11)の台板は略90°  
に屈曲した二面の台板部(12,13)を有しているから、下  
地柱(3)の所定の角部に一方の面の台板部(12)が該下地  
柱(3)のパネル取付面(外面)、他方の面の台板部(13)  
が該下地柱(3)の側面に位置するように当接すると共に  
下側のパネル(1)の端縁(18)を、該パネル支持金具(11)  
の下地柱(3)の外面に当接する方の台板部(12)の支持片  
(16)の下側パネル端縁嵌合部(18)に嵌合し、側面に当接  
する方の台板部(13)を下地柱(3)に固定する。この固定  
作業は例えば台板部(13)のねじ穴(15)を介してねじや釘  
40 等を使用して行なわれるが、該固定作業は下地柱(3)の  
側面で行なわれるので屋内から実施出来ることになる。  
更に下地柱(3)の違う位置の面部に他方の面の台板部(1  
3)が該下地柱(3)の取付面、一方の面の台板部(12)が該  
下地柱(3)の側面に位置するようにパネル支持金具(11)  
を取付けることも出来る。このようにして下地柱(3)に  
固定されたパネル支持金具(11)はその支持片(16)の上側  
において、上側のパネル(1)の端縁(1C)を該台板部(12)  
の支持片(16)の上側パネル端縁嵌合部(17)に嵌合するこ  
とによって該パネル支持金具(11)で上下両側の該パネル  
50 (1,1)を支持する。そして両側のパネル(1,1)の端縁(1

B,1C)を該パネル支持金具(11)の支持片(16)の嵌合部(17,18)に嵌合する場合には、該支持片(16)の両側の台板部(13)部分によって該パネル(1,1)の端縁(18,1C)がガイドされるし、該支持片(16)の両側の台板部(13)部分は等高であるから該上下両側のパネル(1,1)は段差を生じない。

【0007】

【実施例】本発明を図1～図8に示す一実施例によって説明すれば、パネル支持金具(11)の台板は略90°に屈曲せられて二面の台板部(12,13)が形成され、各々の台板部(12,13)の両端縁には斜面(12A,12B,13A,13B)が形成され、一方の斜面(12A,13A)からは更に取付片(12C,13C)が延長され、該斜面(12A,13A)と取付片(12C,13C)とは夫々ねじ穴(14,15)が設けられている。該台板部(12,13)中間からは断面Y字状の支持片(16)が立設されており、該支持片(16)の両側にはパネル(1)の端縁(18,1C)を嵌合する嵌合部である嵌合凹部(17,18)が形成されている。

【0008】上記パネル支持金具(11)を使用して屋内から外壁板(1)を下地柱(3)に取付ける施工方法を下記に説明する。図2に本パネル支持金具(11)が適用される建材パネルである外壁板(1)が示される。該外壁板(1)は木質板、無機質板等からなり、一端縁には上実(1A)、他端縁には下実(1B)が形成されており、上実(1A)の下側には本パネル支持金具(11)の支持片(16)の嵌合凹部(17,18)のいずれかに嵌合する嵌合凸部(1C)が形成されており、また下実(1B)の上側には段部(1D)が形成されている。

【0009】図3に本パネル支持金具(11)を使用する外壁板(1)取付構造の基礎部分が示される。該基礎部分は基礎(20)と、該基礎(20)上に設置されるC型チャンネル(21)と、該C型チャンネル(21)の外側にねじ(23)によって止着される水切金具(22)とからなり、該水切金具(22)上面(22A)の所定箇所には切欠き(22B)が設けられており、該切欠き(22B)の箇所にC型チャンネルである下地柱(3)が立設されている。図4に示すように該下地柱(3)は所定の間隔で基礎(20)から立設されており、更に外壁板(1)の横方向の接合部には角型下地柱(3A)が配置されている。

【0010】このようにして下地柱(3,3A)を立設したら、屋内から下地柱(3,3A)の間または上方から最下位の外壁板(1)を該下地柱(3,3A)の外側に配置して、図3に示すように該外壁板(1)の下端縁の嵌合凸部(1C)を介して水切金具(22)の突縁(22C)に支持させ、該外壁板(1)の上端縁の位置で本パネル支持金具(11)を下地柱(3)に取付ける。該支持金具(11)は図5に示すように一面の台板部(12)を該下地柱(3)のパネル取付面(外面)に配置し、他面の台板部(13)を該下地柱(3)の側面に配置し、屋内において該下地柱(3)の側面に該支持金具(11)の台板部(13)をねじ穴(15)を介してねじ(19)あるいは釘等に

よって固定するが、この際、該支持金具(11)の支持片(16)の下側の嵌合凹部(18)に最下位の外壁板(1)の上端縁の下実(1B)を嵌合する。

【0011】このようにして最下位の外壁板(1)は水切金具(22)の突縁(22C)と支持金具(11)との間で支持されるが、外壁板(1)の横方向の端縁部相互接合部においては図6に示すように角型下地柱(3A)の両角に支持金具(11)が夫々取付けられ、一方の支持金具(11)は台板部(12)側の支持片(16)で一方の外壁板(1)を支持し、他方の支持金具(11)は台板部(13)側の支持片(16)で他方の外壁板(1)を支持し、接合される外壁板(1,1)の間にはジョイナー(24)を介在せしめる。

【0012】このようにして最下位の外壁板(1)の下地柱(3,3A)に取付けたらその上に次の外壁板(1)を屋内から下地柱(3,3A)の間または上方から該下地柱(3,3A)の外側に配置して、図7に示すように該外壁板(1)の下端縁の嵌合凸部(1C)を該支持金具(11)の支持片(16)の嵌合凹部(17)に嵌合し、上実(1A)を下側の外壁板(1)の上端縁の段部(1D)に突合させる。このようにして図8に示すように外壁板(1)を縦列に配列して下地柱(3)に支持金具(11)を介して取付けて壁を施工して行くのであるが、このような施工はすべて屋内から出来るので、図4に示す隣接する建築物Bによって該施工作業が干渉されることがない。

【0013】図9には本発明の工法に使用される支持金具の他の実施例が示される。本実施例の支持金具(31)は略90°に屈曲した二面の台板部(32,33)からなる台板と、該台板部(32,33)中間から立設される支持片(36)とからなり、該支持片(36)の上縁中央部は上方に、両縁部は下方に折曲げて中央部に嵌合凹部(37)、両縁部に嵌合凹部(38)が形成され、該台板部(32,33)の上端部にはねじ穴(34,35)が設けられている。

【0014】

【発明の効果】したがって本発明では、パネル側にねじや釘等を保持するためのインサート部材等を挿入する必要がなく、屋内からパネルを下地柱に取付けることが出来、パネル強度を劣化させることがなくかつパネル取付強度も充分大きなものとなるし、パネル端縁を支持金具の支持片の嵌合部に嵌合する作業も該支持片の両側の台板部部分のガイドによって容易になり、また該支持片の両側の台板部部分は等高であるから接合されるパネル相互に段差を生ずることがなく見栄えが良くなる。

【図面の簡単な説明】

図1～図8は本発明の一実施例を示すものである。

【図1】パネル支持金具

【図2】外壁板部分側面図

【図3】基礎部分斜視図

【図4】外壁上面図

【図5】外壁板の支持部分斜視図

【図6】外壁板横方向接合部分上面図

(4)

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5  
【図7】外壁板縦方向接合部分側断面図

【図8】外壁板縦方向接合部分斜視図

【図9】他の実施例の斜視図

【図10】従来例の説明図

【図11】他の従来例の説明図

【符号の説明】

1 外壁板（パネル）

\* 3

下地柱

11, 31

パネル支持金具

12, 13, 32, 33

台板部

14, 15, 34, 35

ねじ穴

16, 36

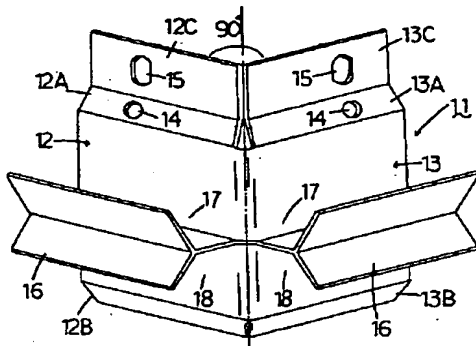
支持片

17, 18, 37, 38

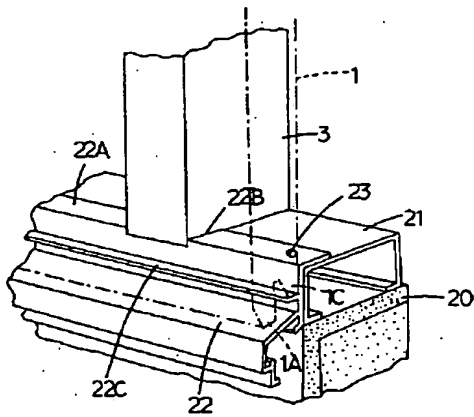
嵌合凹部

\*

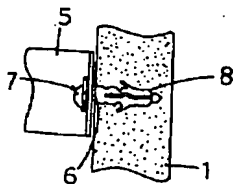
【図1】



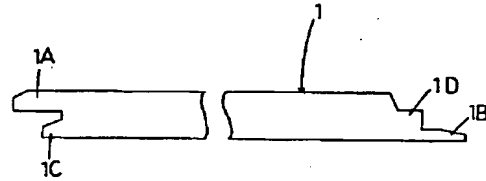
【図3】



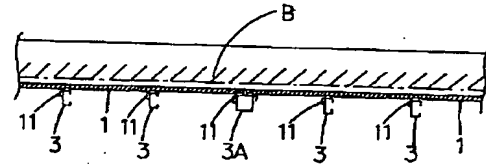
【図11】



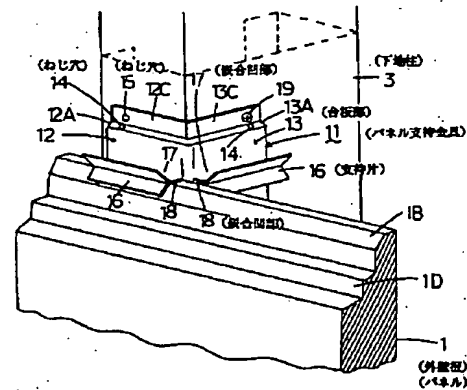
【図2】



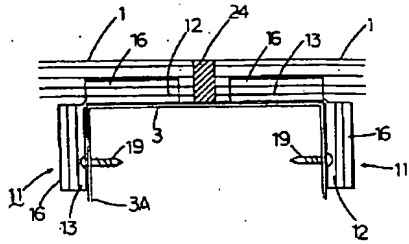
【図4】



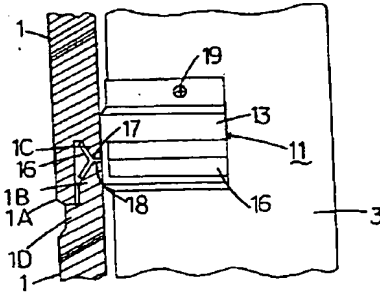
【図5】



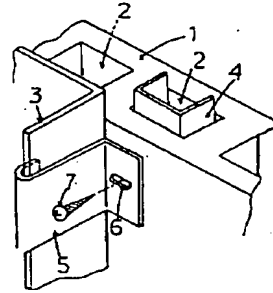
【図6】



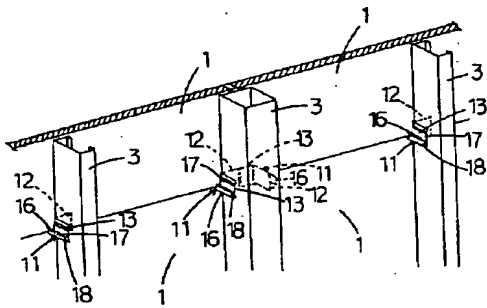
【図7】



【図10】



【図8】



【図9】

